

REMARKS

In the Office Action, claims 1-8 were allowed, claims 12-14 were objected to, and claims 9-11 and 15-50 were rejected. Applicant thanks the Examiner for allowing claims 1-8 and for indicating the allowability of claims 12-14. Additionally, the drawings were objected to as failing to comply with 37 CFR 1.84(p)(5) for not including reference numeral "39" referenced in the description.

By this Reply and Amendment, claims 9, 12, 13, 14 and 33 have been amended, and the original number of claims remains pending in the present application. Claims 12, 13 and 14 have been placed into independent form and include all limitations of the base claim and any intervening claims. Accordingly, those claims should be in condition for allowance. All claim amendments are fully supported throughout the written description and figures of the specification.

The drawings were objected to as failing to comply with 37 CFR 1.84(p)(5) for not including reference numeral "39" referenced in the description. In the specification, reference numeral "39" was mistakenly used in place of the correct reference numeral "30" properly displayed in the figures. Accordingly, the specification has been amended, as set forth above, and the objection is believed no longer applicable.

Claims 9-11 and 15-50 were rejected under 35 USC 103(a) as unpatentable over the Tubel et al. reference, US Patent No. 6,281,489, in view of the Pringle reference, US Patent No. 6,070,608. This rejection is respectfully traversed, however various amendments have been made to the subject independent claims to clarify the claim language and to facilitate allowance of the present application.

The Tubel et al. reference discloses a downhole apparatus that utilizes fiber optic sensors in monitoring the condition of downhole equipment, monitoring geological conditions, reservoir monitoring and remedial operations. (See column 1, lines 17-22). As discussed in the Office Action, the reference describes a system having an optical fiber 944, a valve 930, a photovoltaic

cell 960, sensors 927 and a processing unit 942, however the system is very different from that which is claimed in the present patent application.

As admitted by the Examiner, the Tubel et al. reference fails to disclose numerous elements of the originally pending claims. A blanket statement is made in the Office Action that these missing elements would have been obvious to a person having ordinary skill in the art at the time the invention was made. However, no evidence is supplied as to how or why such person would possess the inventive insight to arrive at these numerous elements not taught by the reference. Applicant strongly disagrees with the assertions in the Office Action and requests the Examiner provide evidence to support these assertions, if any part of the rejection is maintained.

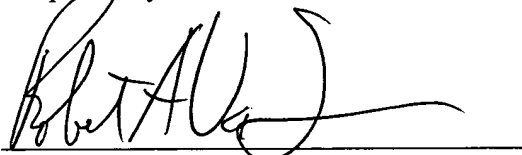
The Pringle reference discloses a valve for sealable insertion in a mandrel, the valve having a variable orifice. However, there is no disclosure, teaching or suggestion in the Tubel et al. reference or the Pringle reference, taken alone or in combination, of an actuator controlled by light that can adjust a valve in a wellbore to a plurality of settings including at least one setting between an open and a closed position.

Specifically, the cited references, taken alone or in combination, do not disclose, teach or suggest numerous elements of the presently pending claims. For example, the references do not disclose, teach or suggest a gas lift valve having a variable orifice with at least one setting between an open and a closed setting, wherein the gas lift valve is activated and controlled by light transmitted through a fiber in which the setting of the variable orifice is "controlled by the intensity of the light" as recited in amended, independent claim 9. Similarly, the references do not disclose, teach or suggest activating and controlling a gas lift valve to adjust the valve to a position "selected from at least a three possible positions" in which the position depends on both output from a monitoring unit to a control unit and on adjustment of the gas lift valve to one of the positions "in response to the light transmitted by the control unit through the fiber" as recited in amended, independent claim 33. Accordingly, amended, independent claims 9 and 33 should be in condition for allowance.

Former dependent claims 12, 13 and 14 have been placed into independent form, as discussed above, and should be in condition for allowance. However, claims 10, 11 and 15-32 ultimately depend from independent claim 9, and the claims 34-50 ultimately depend from independent claim 33. These remaining dependent claims are patentable over the cited references for the reasons provided above with respect to the corresponding independent claims as well as for the unique subject matter recited in those dependent claims.

In view of the foregoing remarks, the pending claims are believed patentable over the cited references. However, if the Examiner believes certain amendments are necessary to clarify the present claims or if the Examiner wishes to resolve other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Robert A. Van Someren', written over a horizontal line.

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